

Device Errors

Implanted pacemakers

AVOIDING **ELECTROMAGNETIC** INTERFERENCE

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A PERSON WITH A PACEMAKER IMPLANT became faint while talking on a cellular phone. In another incident, a pacemaker user became dizzy while sitting near a person using a cellular phone. Unfortunately, later investigation couldn't confirm whether these symptoms were related to cellular phone use.

What went wrong?

Implantable pacemakers are designed to sense and pace the heart when the patient's own conduction system fails. But the electrical signals from some cellular phones may interfere if they're used within 6 inches (15 cm) of the

pacemaker. For example, a sensitive pacemaker may sense the electrical activity from a nearby cellular phone, which may inhibit the pacemaker.

What precautions can you take?

Share these tips with your patients who have pacemakers:

- Read your pacemaker manual.
- Hold the phone to the ear on the opposite side of the pacemaker.
- Store the phone on the side opposite the implant—6 inches away.
- Have the pacemaker checked if you feel dizzy or faint.

Retail store antitheft systems may

also pose a problem. Give your patient these additional tips:

- Move quickly through antitheft devices; don't linger near them.
- If your pacemaker changes its pacing mode in response to an antitheft device, move away immediately. The pacemaker should revert to its previous mode as distance increases.

Check <http://www.fda.gov/cdrh> for more information. ■

Although you need to support the adverse event-reporting policy of your health care facility, you may voluntarily report a medical device that doesn't perform as intended by calling **MedWatch** at 1-800-FDA-1088 (fax: 1-800-FDA-0178). The opinions and statements contained in this report are those of the author and may not reflect the views of the Department of Health and Human Services. Device Errors is coordinated by Chris Parmentier, RN.